Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A system for identifying a scrambling code from signals received from a base station, comprising:

a scrambling code generator configured to generate a master scrambling code, wherein a period of the master scrambling code is a function of a correlation length and a number of cells C within a group of cells;

control logic configured to generate a plurality of individual scrambling codes based on the master scrambling code, the plurality of individual scrambling codes being sequential and any two adjacent individual scrambling codes having a predetermined chip offset; and

a plurality of correlators configured to perform correlations and generate correlation results, each correlator configured to correlate the received signals with a corresponding one of the plurality of individual scrambling codes and generate corresponding correlation results, the plurality of correlators performing their correlations in a parallel manner.

Claim 2. (original) The system according to claim 1 wherein the correlation results generated by the plurality of correlators are evaluated to identify the scrambling code from the received signals thereby allowing the identity of the base station which transmitted the received signals to be identified.

Claim 3. (original) The system according to claim 1 wherein the plurality of correlators perform their correlations in a real-time manner.

Claim 4. (original) A mobile terminal incorporating the system as recited in claim 1.

Claim 5. (original) The system according to claim 1 wherein the base station is located in a W-CDMA communication network.

Claim 6. (currently amended) A system for identifying a scrambling code from signals received from a base station, the base station belonging to one of a plurality of base station groups in a communication network, the system comprising:

a scrambling code generator configured to generate a master scrambling code, wherein a period of the master scrambling code is a function of a correlation length and a number of cells C within a group of cells;

control logic configured to generate a plurality of individual scrambling codes based on the master scrambling code, the plurality of individual scrambling codes being sequential and any two adjacent individual scrambling codes having a predetermined chip offset; and

a plurality of correlators configured to perform correlations and generate correlation results, each correlator configured to correlate the received signals with a corresponding one of the plurality of individual scrambling codes and generate corresponding correlation results, the plurality of correlators performing their correlations in a parallel manner.

Claim 7. (original) The system according to claim 6 wherein the master scrambling code has a period determined by a correlation length and a predetermined group chip offset.

Claim 8. (original) The system according to claim 7 wherein the predetermined group chip offset is determined by number of base stations within a base station group and the predetermined chip offset.

Claim 9. (original) The system according to claim 6 wherein the plurality of correlators perform their correlations in a real-time manner.

Claim 10. (original) A mobile terminal incorporating the system as recited in claim 6.

Claim 11. (original) The system according to claim 6 wherein the communication network is a W-CDMA communication network.

Claim 12. (currently amended) A method for identifying a scrambling code from signals received from a base station, comprising:

generating a master scrambling code, wherein a period of the master scrambling code is a function of a correlation length and a number of cells C within a group of cells;

generating a plurality of individual scrambling codes, wherein the plurality of individual scrambling codes are sequential and any two adjacent individual scrambling codes are separated by a predetermined chip offset; and

correlating the received signals with each of the plurality of individual scrambling codes in a parallel manner and generating correlation results therefor.

Claim 13. (original) The method of claim 12 further comprising:

evaluating the correlation results to identify the scrambling code from the received signals thereby allowing the identity of the base station which transmitted the received signals to be identified.

Claim 14. (original) The method of claim 12 wherein the base station belongs to one of a plurality of base station groups in a communication network and the step of generating the master scrambling code further comprises:

selecting a correlation length; and

generating the master scrambling code using the selected correlation length and a predetermined group chip offset.

Claim 15. (original) The method of claim 14 wherein the predetermined group chip offset is determined by number of base stations within a base station group and the predetermined chip offset.

Claim 16. (original) The method of claim 12 wherein the correlations are performed in a real-time manner.

Claim 17. (original) A mobile terminal utilizing the method as recited in claim 12.

Claim 18. (original) The method according to claim 12 wherein the base station is located in a W-CDMA communication network.

Claim 19. (currently amended) A system for identifying a scrambling code from signals received from a base station, comprising:

means for generating a master scrambling code, wherein a period of the master scrambling code is a function of a correlation length and a number of cells C within a group of cells;

means for generating a plurality of individual scrambling codes, wherein the plurality of individual scrambling codes are sequential and any two adjacent individual scrambling codes are separated by a predetermined chip offset; and

means for correlating the received signals with each of the plurality of individual scrambling codes in a parallel manner and generating correlation results therefor.

Claim 20. (original) The system according to claim 19 further comprising:

means for evaluating the correlation results to identify the scrambling code from the received signals thereby allowing the identity of the base station which transmitted the received signals to be identified.

Claim 21. (original) The system of claim 19 wherein the means for correlating performs its correlations in a real-time manner.

Claim 22. (original) A mobile terminal utilizing the system as recited in claim 19.

Claim 23. (original) The system according to claim 19 wherein the base station is located in a W-CDMA communication network.

Claim 24. (new) The system according to claim 1 wherein the master scrambling code length is determined by the formula N+CO*(C-1), wherein N is the correlation length, and CO is the chip offset.